

***What Is Claimed Is:***

1. A method for treating graft versus host disease, viral infection, immunodeficiency, or an autoimmune disorder comprising administering to an individual therapeutically effective amounts of:

(a) a first therapeutic agent comprising an antibody which binds to a polypeptide selected from the group consisting of:

- (i) amino acids 1 to 411 of SEQ ID NO:2;
- (ii) amino acids 52 to 411 of SEQ ID NO:2;
- (iii) amino acids 52 to 184 of SEQ ID NO:2;
- (iv) the amino acid sequence of the full-length polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920;
- (v) the amino acid sequence of the mature polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920; and
- (vi) the amino acid sequence of the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920;

and

(b) a second therapeutic agent selected from the group consisting of:

- (i) TRAIL;
- (ii) a tumor necrosis factor;
- (iii) a tumor necrosis factor blocking agent;
- (iv) an immunosuppressive agent;
- (v) an antibiotic;
- (vi) an anti-inflammatory agent;
- (vii) a chemotherapeutic agent; and
- (viii) a cytokine.

A The method of claim 1, wherein said first therapeutic agent comprises an antibody which binds to a polypeptide consisting of amino acids 52 to 184 of SEQ ID NO:2.

3. The method of claim 1, wherein said first therapeutic agent comprises an antibody which binds to a polypeptide consisting of the amino acid sequence of the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920.

4. The method of claim 1, wherein said antibody is an agonist of a polypeptide comprising amino acids 52 to 184 of SEQ ID NO:2.

5. The method of claim 1, wherein said antibody is an agonist of a polypeptide comprising the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920.

6. The method of claim 1, wherein said antibody is an antagonist of a polypeptide comprising amino acids 52 to 184 of SEQ ID NO:2.

7. The method of claim 1, wherein said antibody is an antagonist of a polypeptide comprising the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920.

8. The method of claim 1, wherein said antibody is an agonistic antibody.

9. The method of claim 1, wherein said antibody is a monoclonal antibody.

10. The method of claim 1, wherein said antibody is a polyclonal antibody.

11. The method of claim 1, wherein said antibody is a chimeric antibody.

12. The method of claim 1, wherein said antibody is a human antibody.

13. The method of claim 1, wherein said antibody is a humanized antibody.

14. The method of claim 1, wherein said antibody is a single-chain Fv antibody.

15. The method of claim 1, wherein said antibody is an Fab antibody fragment.
16. The method of claim 1, wherein said antibody is pegylated.
17. The method of claim 1, wherein said antibody is fused to a heterologous polypeptide.
18. The method of claim 1, wherein said first and second therapeutic agents are administered to the individual at the same time.
19. The method of claim 1, wherein said first and second therapeutic agents are administered to the individual at different times.
20. The method of claim 1, wherein said second therapeutic agent is TRAIL.
21. The method of claim 1, wherein said second therapeutic agent is a tumor necrosis factor blocking agent comprising an antibody that binds to a protein selected from the group consisting of:
  - (a) TNF- $\alpha$ ;
  - (b) TNF- $\beta$ ;
  - (c) TNF- $\gamma$  ;
  - (d) TNF- $\gamma$ - $\alpha$ ; and
  - (e) TNF- $\gamma$ - $\beta$ .
22. The method of claim 1, wherein said second therapeutic agent is an immunosuppressive agent selected from the group consisting of:
  - (a) cyclosporine;
  - (b) cyclophosphamide;
  - (c) methylprednisone;
  - (d) prednisone;
  - (e) azathioprine;
  - (f) FK-506; and
  - (g) 15-deoxyspergualin.

23. The method of claim 1, wherein said second therapeutic agent is a cytokine selected from the group consisting of:

- (a) IL-2;
- (b) IL-3;
- (c) IL-4;
- (d) IL-5;
- (e) IL-6;
- (f) IL-7;
- (g) IL-10;
- (h) IL-12;
- (i) IL-13;
- (j) IL-15; and
- (k) IFN- $\gamma$ .

24. The method of claim 1, wherein said second therapeutic agent is a chemotherapeutic agent selected from the group consisting of:

- (a) an alkylating agent;
- (b) an antimetabolite;
- (c) a farnesyl transferase inhibitor;
- (d) a mitotic spindle inhibitor;
- (e) a nucleotide analog;
- (f) a platinum analog; and
- (g) a topoisomerase inhibitor.

25. The method of claim 1, wherein said second therapeutic agent is a chemotherapeutic agent selected from the group consisting of:

- (a) ibritumomab tiuxetan (Zevalin™);
- (b) imatinib mesylate (Gleevec®);
- (c) bortezomib (Velcade™); and
- (d) a smac peptide or polypeptide.

26. A method for treating cancer comprising administering to an individual therapeutically effective amounts of:

(a) a first therapeutic agent comprising an antibody which binds to a polypeptide selected from the group consisting of:

- (i) amino acids 1 to 411 of SEQ ID NO:2;
- (ii) amino acids 52 to 411 of SEQ ID NO:2;
- (iii) amino acids 52 to 184 of SEQ ID NO:2;
- (iv) the amino acid sequence of the full-length polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920;
- (v) the amino acid sequence of the mature polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920; and
- (vi) the amino acid sequence of the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920;

and

(b) a second therapeutic agent selected from the group consisting of:

- (i) TRAIL;
- (ii) a tumor necrosis factor;
- (iii) a tumor necrosis factor blocking agent;
- (iv) an immunosuppressive agent;
- (v) an antibiotic;
- (vi) an anti-inflammatory agent;
- (viii) a chemotherapeutic agent; and
- (viii) a cytokine.

27. The method of claim 26, wherein said first therapeutic agent comprises an antibody which binds to a polypeptide consisting of amino acids 52 to 184 of SEQ ID NO:2.

28. The method of claim 26, wherein said first therapeutic agent comprises an antibody which binds to a polypeptide consisting of the amino acid sequence of the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920.

29. The method of claim 26, wherein said antibody is an agonist of a polypeptide comprising amino acids 52 to 184 of SEQ ID NO:2.

30. The method of claim 26, wherein said antibody is an agonist of a polypeptide comprising the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920.

31. The method of claim 26, wherein said antibody is an antagonist of a polypeptide comprising amino acids 52 to 184 of SEQ ID NO:2.

32. The method of claim 26, wherein said antibody is an antagonist of a polypeptide comprising the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920.

33. The method of claim 26, wherein said antibody is an agonistic antibody.

34. The method of claim 26, wherein said antibody is a monoclonal antibody.

35. The method of claim 26, wherein said antibody is a polyclonal antibody.

36. The method of claim 26, wherein said antibody is a chimeric antibody.

37. The method of claim 26, wherein said antibody is a human antibody.

38. The method of claim 26, wherein said antibody is a humanized antibody.

39. The method of claim 26, wherein said antibody is a single-chain Fv antibody.

40. The method of claim 26, wherein said antibody is an Fab antibody fragment.

41. The method of claim 26, wherein said antibody is pegylated.

42. The method of claim 26, wherein said antibody is fused to a heterologous polypeptide.

43. The method of claim 26, wherein said first and second therapeutic agents are administered to the individual at the same time.

44. The method of claim 26, wherein said first and second therapeutic agents are administered to the individual at different times.

45. The method of claim 26, wherein said second therapeutic agent is TRAIL.

46. The method of claim 26, wherein said second therapeutic agent is a tumor necrosis factor blocking agent comprising an antibody that binds to a protein selected from the group consisting of:

- (a) TNF- $\alpha$ ;
- (b) TNF- $\beta$ ;
- (c) TNF- $\gamma$  ;
- (d) TNF- $\gamma$ - $\alpha$ ; and
- (e) TNF- $\gamma$ - $\beta$ .

47. The method of claim 26, wherein said second therapeutic agent is an immunosuppressive agent selected from the group consisting of:

- (a) cyclosporine;
- (b) cyclophosphamide;
- (c) methylprednisone;
- (d) prednisone;
- (e) azathioprine;
- (f) FK-506; and
- (g) 15-deoxyspergualin.

48. The method of claim 26, wherein said second therapeutic agent is a cytokine selected from the group consisting of:

- (a) IL-2;
- (b) IL-3;
- (c) IL-4;
- (d) IL-5;
- (e) IL-6;
- (f) IL-7;
- (g) IL-10;
- (h) IL-12;
- (i) IL-13;
- (j) IL-15; and
- (k) IFN- $\gamma$ .

49. The method of claim 26, wherein said second therapeutic agent is a chemotherapeutic agent selected from the group consisting of:

- (a) an alkylating agent;
- (b) an antimetabolite;
- (c) a farnesyl transferase inhibitor;
- (d) a mitotic spindle inhibitor;
- (e) a nucleotide analog;
- (f) a platinum analog; and
- (g) a topoisomerase inhibitor.

50. The method of claim 26, wherein said second therapeutic agent is a chemotherapeutic agent selected from the group consisting of:

- (a) ibritumomab tiuxetan (Zevalin™);
- (b) imatinib mesylate (Gleevec®);
- (c) bortezomib (Velcade™); and
- (d) a smac peptide or polypeptide.



51. A composition comprising:

(a) a first therapeutic agent comprising an antibody which binds to a polypeptide selected from the group consisting of:

(i) amino acids 1 to 411 of SEQ ID NO:2, wherein said polypeptide is expressed on the surface of a cell;

(ii) amino acids 52 to 411 of SEQ ID NO:2, wherein said polypeptide is expressed on the surface of a cell;

(iii) amino acids 52 to 184 of SEQ ID NO:2, wherein said polypeptide is expressed on the surface of a cell;

(iv) the amino acid sequence of the full-length polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920, wherein said polypeptide is expressed on the surface of a cell;

(v) the amino acid sequence of the mature polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920, wherein said polypeptide is expressed on the surface of a cell; and

(vi) the amino acid sequence of the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920, wherein said polypeptide is expressed on the surface of a cell;

and

(b) a second therapeutic agent selected from the group consisting of:

(i) TRAIL;

(ii) a tumor necrosis factor;

(iii) a tumor necrosis factor blocking agent;

(iv) an immunosuppressive agent;

(v) an antibiotic;

(vi) an anti-inflammatory agent;

(vii) a chemotherapeutic agent; and

(viii) a cytokine.

52. The composition of claim 51, which further comprises a pharmaceutically acceptable carrier.

53. The composition of claim 51, wherein said first therapeutic agent comprises an antibody which binds to a polypeptide consisting of amino acids 52 to 184 of SEQ ID NO:2.

54. The composition of claim 51, wherein said first therapeutic agent comprises an antibody which binds to a polypeptide consisting of the amino acid sequence of the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920.

55. The composition of claim 51, wherein said antibody is an agonist of a polypeptide comprising amino acids 52 to 184 of SEQ ID NO:2.

56. The composition of claim 51, wherein said antibody is an agonist of a polypeptide comprising the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920.

57. The composition of claim 51, wherein said antibody is an antagonist of a polypeptide comprising amino acids 52 to 184 of SEQ ID NO:2.

58. The composition of claim 51, wherein said antibody is an antagonist of a polypeptide comprising the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920.

59. The composition of claim 51; wherein said antibody is an agonistic antibody.

60. The composition of claim 51, wherein said antibody is a monoclonal antibody.

61. The composition of claim 51, wherein said antibody is a polyclonal antibody.

62. The composition of claim 51, wherein said antibody is a chimeric antibody.

63. The composition of claim 51, wherein said antibody is a human antibody.

64. The composition of claim 51, wherein said antibody is a humanized antibody.

65. The composition of claim 51, wherein said antibody is a single-chain Fv antibody.

66. The composition of claim 51, wherein said antibody is an Fab antibody fragment.

67. The composition of claim 51, wherein said antibody is pegylated.

68. The composition of claim 51, wherein said antibody is fused to a heterologous polypeptide.

69. The composition of claim 51, wherein said second therapeutic agent is TRAIL.

70. The composition of claim 51, wherein said second therapeutic agent is a tumor necrosis factor blocking agent comprising an antibody that binds to a protein selected from the group consisting of:

- (a) TNF- $\alpha$ ;
- (b) TNF- $\beta$ ;
- (c) TNF- $\gamma$  ;
- (d) TNF- $\gamma$ - $\alpha$ ; and
- (e) TNF- $\gamma$ - $\beta$ .

71. The composition of claim 51, wherein said second therapeutic agent is an immunosuppressive agent selected from the group consisting of:

- (a) cyclosporine;
- (b) cyclophosphamide;
- (c) methylprednisone;
- (d) prednisone;
- (e) azathioprine;
- (f) FK-506; and
- (g) 15-deoxyspergualin.

72. The composition of claim 51, wherein said second therapeutic agent is a cytokine selected from the group consisting of:

- (a) IL-2;
- (b) IL-3;
- (c) IL-4;
- (d) IL-5;
- (e) IL-6;
- (f) IL-7;
- (g) IL-10;
- (h) IL-12;
- (i) IL-13;
- (j) IL-15; and
- (k) IFN- $\gamma$ .

73. The composition of claim 51, wherein said second therapeutic agent is a chemotherapeutic agent selected from the group consisting of:

- (a) an alkylating agent;
- (b) an antimetabolite;
- (c) a farnesyl transferase inhibitor;
- (d) a mitotic spindle inhibitor;
- (e) a nucleotide analog;
- (f) a platinum analog; and
- (g) a topoisomerase inhibitor.

74. The composition of claim 51, wherein said second therapeutic agent is a chemotherapeutic agent selected from the group consisting of:

- (a) ibritumomab tiuxetan (Zevalin™);
- (b) imatinib mesylate (Gleevec®);
- (c) bortezomib (Velcade™); and
- (d) a smac peptide or polypeptide.

75. A method for treating a disease or condition selected from the group consisting of:

- (a) cancer;
- (b) inflammation;
- (c) an autoimmune disease; and
- (d) graft v. host disease,

wherein said method comprises administering to an individual in need thereof, a therapeutically effective amount of the composition of claim 51.

76. A method for causing death of a cell, which expresses on its surface a polypeptide having an amino acid sequence selected from the group consisting of:

- (a) amino acids 52 to 411 of SEQ ID NO:2; and
- (b) amino acids 52 to 184 of SEQ ID NO:2;

wherein said method comprises contacting said cell with the composition of claim 51.

77. A method for causing death of a cell, which expresses on its surface a polypeptide having an amino acid sequence selected from the group consisting of:

- (a) the amino acid sequence of the full-length polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920;
- (b) the amino acid sequence of the mature polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920; and
- (c) the amino acid sequence of the extracellular domain of the polypeptide encoded by the cDNA contained in ATCC Deposit No. 97920;

wherein said method comprises contacting said cell with the composition of claim 51.